

Claim 4 (original) A method to nondestructively inspect residential building components for a designated entity, the residential building having an inside and an outside, comprising the steps of:

creating a temperature differential of greater than 10° F between the inside and the outside of said residential building;

turning on substantially all light switches and substantially all exhaust blowers in said residential building;

obtaining temperature profiles of the exterior residential building components selected from the group consisting of wall, eave, and fascia;

assessing at least one of said temperature profiles to detect a thermal anomaly indicative of a problem with said residential building components; and

reporting said problem to said designated entity.

Claim 5 (original) The method of claim 4 further comprising: obtaining temperature profiles of the interior surface of a pitched roof, prior to assessing at least one of said temperature profiles.

Claim 6 (original) The method of claim 4 further comprising: obtaining temperature profiles of interior residential building components, prior to assessing at least one of said temperature profiles.

Claim 7 (original) The method of claim 4 further comprising: creating sufficient air flow in a basement to facilitate evaporation and obtaining temperature profiles of a basement wall, prior to assessing at least one of said temperature profiles.

Claim 8 (original) The method of claim 4 further comprising: obtaining temperature profiles of each electrical circuit in a residential building, prior to assessing at least one of said temperature profiles.

Claim 9 (original) The method of claim 4 wherein said temperature profiles are captured by a thermal imaging camera affixed to the harness apparatus of claim 31.

Claim 10 (original) A method to rapidly inspect residential building components for a designated entity comprising:

- creating a temperature differential of greater than 10°F between the inside and the outside of said residential building;

- turning on substantially all light switches and substantially all exhaust blowers in said residential building;

- obtaining temperature profiles of the exterior residential building components selected from the group consisting of wall, eave and fascia;

- obtaining temperature profiles of the interior surface of a pitched roof;

- obtaining temperature profiles of the interior residential building components;

- obtaining temperature profiles of each electrical circuit in a residential building;

- assessing each of said temperature profiles to detect a thermal anomaly indicative of a problem with said residential building components; and

- reporting a problem to said designated entity;

wherein the time between creating a temperature differential of greater than 10° F between the inside and the outside of said residential building.

Claim 11 (original) The method of claim 10 further comprising: creating sufficient air flow in a basement to facilitate evaporation; and obtaining temperature profiles of a basement wall prior to assessing each of said temperature profiles.

Claim 12 (original) A method to inspect interior building components of a residential building having an inside and an outside comprising:

creating a temperature differential of greater than 10°F between the inside and the outside of said residential building;

obtaining temperature profiles of said interior building components; and

assessing each of said temperature profiles for a thermal anomaly.

Claim 13 (original) The method of claim 12 wherein said interior building components are selected from the group consisting of wall and ceiling and said thermal anomaly is indicative of an uninsulated interior building component.

Claim 14 (original) The method of claim 12 wherein one of said interior building components is a plumbing fixture and said thermal anomaly is indicative of moisture.

Claim 15 (original) The method of claim 12 wherein one of said interior building components is an air duct and said thermal anomaly is indicative of moisture in said air duct.

Claim 16 (original) The method of claim 12 wherein said interior building components is selected from the group consisting of a wall and a ceiling and said thermal anomaly is indicative of damage to insulation by small animals.

Claim 17 (original) The method of claim 12 wherein said interior building components are selected from the group consisting of a wall and a ceiling and said thermal anomaly is indicative of misaligned structural member.

Claim 18 (original) The method of claim 12 wherein said interior building components are selected from the group consisting of a wall and a ceiling and said thermal anomaly is indicative of wood destroying insects.

Claim 19 (original) The method of claim 12 wherein one of said interior building components is an air duct and said thermal anomaly is indicative of air leaking out of said air duct.

Claim 20 (original) The method of claim 12 wherein one of said interior building components is a ceiling and said thermal anomaly is indicative of condensation.

Claim 21 (original) The method of claim 12 wherein said temperature profiles are recorded on a digital recording device.

Claim 22 (original) A method to locate the source of mold growth in a residential building having an inside and an outside comprise the steps of:

creating a temperature differential of greater than 10° F between the inside of a residential building;

obtaining temperature profiles of interior residential building components;

reviewing said temperature profiles for a thermal anomaly indicative of moisture; and

correlating moisture in said interior residential building with mold growth.

Claim 23 (original) The method of claim 22 wherein said temperature profiles are recorded on a digital recording device.

Claim 24 (original) A method to inspect a basement wall for cracks comprising:

creating sufficient air flow in the basement to facilitate evaporation;

obtaining temperature profiles of said basement wall; and

assessing each of said temperature profiles for a thermal anomaly indicative of cracks in said basement wall.

Claim 25 (original) The method of claim 24 wherein said temperature profiles are recorded on a digital recording device.

Claim 26 (original) A method to detect a potential problem with an electrical circuit in a residential building comprising:

turning on substantially all light switches in said residential building;

turning on substantially all exhaust blowers in said residential building;

obtaining temperature profiles of substantially all electrical outlets in said residential building; and

assessing each of said temperature profiles for an anomaly indicative of an electrical problem.

Claim 27 (original) The method of claim 26 wherein said electrical problem is an overload of an electrical circuit.

Claim 28 (original) The method of claim 26 wherein said electrical problem is contact surface over heat.

Claim 29 (original) The method of claim 26 wherein said electrical problem is hot electrical wire within a wall.

Claim 30 (original) The method of claim 26 wherein said temperature profiles are recorded on a digital recording device.

Claim 31 (original) A harness apparatus for providing a stable hands free platform for at least one residential inspection device comprising:

a first portion configured to support at least part of at least one residential inspection device; and

a second portion configured to receive the shoulder portions of a human torso, wherein said first portion and second portion form an enclosure of sufficient size to accommodate a human torso;

wherein said first portion and second portion are configured to form a platform for at least one residential inspection device.

Claim 32 (original) The harness apparatus of claim 31 wherein said at least one residential inspection device is a thermal imaging camera.

Claim 33 (original) The harness apparatus of claim 31 wherein said at least one residential inspection device is a means to transmit a digital image.

Claim 34 (original) The harness apparatus of claim 31 wherein said at least one residential inspection device is a video recording device.

Claim 35 (original) The harness apparatus of claim 31 wherein said at least one residential inspection device is a thermal imaging camera and a video recording device and said thermal imaging camera is operably connected to said video recording device.

Claim 36 (original) The harness apparatus of claim 31 wherein said at least one residential inspection device is attached to said first portion.

Claim 37 (original) The harness apparatus of claim 31 wherein said at least one residential inspection device is attached to said second portion.

Claim 38 (Original) The harness apparatus of claim 31 wherein said first portion includes a handle projecting generally downwardly.

Claim 39 (original) The harness apparatus of claim 31 wherein said second portion includes a plurality of handles projecting generally downwardly.

Claim 40 (original) The harness apparatus of claim 31 wherein said second portion is configured to support at least a part of a thermal imaging camera.

Claim 41 (original) The harness apparatus of claim 31 wherein said second portion is configured to support at least part of a video recording device.

Claim 42 (currently amended) A method to inspect an exterior component of a residential building wherein said exterior residential building component is selected from the group consisting of wall, eave and fascia, comprising the steps of:

obtaining temperature profiles of the exterior residential building components during a thermal window; and

assessing each of said temperature profiles for a thermal anomaly.

Claim 43 (original) The method of claim 42 wherein said thermal anomaly is indicative of moisture.

Claim 44 (original) The method of claim 42 wherein said thermal anomaly is indicative of structural deformation.

Claim 45 (original) The method of claim 42 wherein said thermal anomaly is indicative of insect infestation.

Claim 46 (currently amended) The method of claim 42 wherein said thermal window is ~~temperature profiles are obtained~~ after sunrise.

Claim 47 (currently amended) The method of claim 42 wherein said thermal window is ~~temperature profiles are obtained~~ after sunset.

Claim 48 (original) The method of claim 42 wherein said thermal anomaly is indicative of a structural deformation due to the past presence of moisture.

Claim 49 (original) The method of claim 42 wherein said temperature profiles are recorded on a digital recording device.

Claim 50 (original) A method to inspect the condition of a pitched roof of a residential building comprising:

obtaining temperature profiles of the interior surface of said pitched roof within three days of rain; and

assessing each of said temperature profiles for a thermal anomaly.

Claim 51 (original) The method of claim 50 wherein said thermal anomaly is indicative of moisture.

Claim 52 (original) The method of claim 50 wherein said thermal anomaly is indicative of structural deformation.

Claim 53 (original) The method of claim 50 wherein said temperature profiles are recorded on a digital recording device.

Claim 54 (original) A computerized method for facilitating inspection of a residential building comprising the steps of:

maintaining a database of temperature profiles for residential building components on a computer;

scanning said database for selected temperature profiles of residential building components; and

controlling a printing device to print a report showing selected temperature profiles of residential building components.

Claim 55 (original) The computerized method of claim 54 wherein said temperature profiles are input to said computer via wireless transmission means.

Claim 56 (original) The computerized method of claim 54 wherein said temperature profiles are input to said computer via nonwireless transmission means.

Claim 57 (original) The computerized method of claim 54 wherein said selected temperature profiles are for a specific residential building.

Claim 58 (original) The methods of claim 54 wherein said selected temperature profiles are taken on different days.

Claim 59 (original) The computerized method of claim 47 wherein said temperature profiles are input to said computer via nonwireless transmission means.


CONCLUSION

Applicant respectfully submits that all pending claims are now in condition for allowance.

Respectfully Submitted,


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9-16-04
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